AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) An energy meter ~~device~~ comprising:

[[- ]] a first analog/digital transformer comprising an ~~initial~~ input ~~(1)~~ configured to ~~feed~~ receive a signal ~~that is~~ derived from a ~~one~~ voltage and to provide ~~(V), which is connected to an initial analog/digital transformer (3), which comprises~~ an output,

[[-]] a second analog/digital transformer comprising an ~~a second~~ input [[(2)]] configured to ~~feed~~ receive a signal ~~that is~~ derived from a ~~one~~ current and to provide ~~(I), whereto a second analog/digital transformer (4) is attached, which comprises~~ an output,

~~a multiplier (7), which links the outputs of both analog/digital transformers; (3,4) with one another,~~

[[-]] a phase evaluation block ~~(9) with~~ comprising first and second ~~two~~ inputs and an output, ~~which are coupled to the outputs of both analog/digital transformers (3,4)~~ wherein the first input of the phase evaluation block is electrically connected to the output of the first analog/digital transformer and the second input of the phase evaluation block is connected to the output of the second analog/digital transformer; ~~and with one output that is linked with a control input of a phase correction block (6),~~ and

[[-]] a ~~the~~ phase correction block ~~(6),~~ comprising a control input electrically

connected to the output of the phase evaluation block, wherein the phase correction block is ~~which is coupled~~ connected to an output of at least one of the first and second analog/digital ~~one of both analog/digital~~ transformers and the phase correction block is configured ~~(4), designed~~ to correct a phase deviation ~~(ΔΦ)~~ of ~~the~~ a digitized signal that is derived from ~~a~~ at least one of the current ~~(I) or a~~ and the voltage. ~~(V).~~

2. (Currently Amended) The energy meter of ~~device according to~~ claim 1, wherein ~~characterized by the fact that~~ the phase evaluation block ~~(9)~~ comprises a control block ~~(12)~~ configured to trigger the phase correction block ~~(6) depending~~ based on the phase deviation. ~~(ΔΦ).~~

3. (Currently Amended) The energy meter of ~~device according to~~ claim 2, wherein the ~~characterized by the fact that~~ control block ~~(12) contains~~ comprises a storage device configured to store ~~means for the permanent storage of~~ a phase correction value. ~~(18).~~

4. (Currently Amended) The energy meter of ~~device according to~~ claim 2, wherein the ~~or 3, characterized by the fact that~~ phase evaluation block ~~(9)~~ comprises a phase difference detector, the phase difference detector comprising:

a first input electrically connected to the output of the first analog/digital transformer;

a second input electrically connected to the output of the second analog/digital transformer; ~~(11) with two inputs, which are coupled to the outputs of both analog/digital transformers (3,4),~~ and

~~with~~ an output ~~that is~~ electrically connected ~~with~~ to the control block. ~~(12).~~

5. (Currently Amended) The energy meter of ~~device according to~~ claim 4, wherein the ~~characterized by the fact that~~ phase evaluation block further ~~(9)~~ comprises a phase layer detector ~~(10), which is coupled~~ between the outputs of ~~both analog/digital~~ the first and second analog/digital transformers ~~(3,4)~~ and the first and second inputs of the phase difference detector. ~~(11).~~

6. (Currently Amended) The energy meter of ~~device according to~~ claim 5, wherein the ~~characterized by the fact that~~ phase layer detector is configured ~~(10) is designed~~ to ~~establish~~ determine signal peak values of the digitized signal.

7. (Currently Amended) The energy meter of ~~device according to~~ claim 5, wherein the ~~characterized by the fact that~~ phase layer detector is configured ~~(10) is designed~~ to ~~establish~~ determine signal zero points of the digitized signal.

8. (Currently Amended) The energy meter ~~device~~ of claim 1, wherein ~~according to one of the claims 1 to 7, characterized by the fact that~~ the first and second ~~analog/digital~~

~~transformer (3,4)~~ analog/digital transformers comprise ~~are each constructed as~~ sigma-delta transformers.

9. (Currently Amended) The energy meter of ~~device according to one of the claims 1 to 8~~ claim 22, ~~characterized by the fact that~~ further comprising an integrator ~~(8) is provided, which is operated subsequent~~ electrically connected to the multiplier. ~~(7).~~

10. (Currently Amended) The energy meter of ~~device according to one of the claims 1 to 9~~ claim 1, ~~characterized by the fact that~~ wherein the first and second ~~analog/digital transformer (3,4)~~ analog/digital transformers, the phase correction block, ~~(6)~~ and the phase evaluation block ~~(9) are designed in~~ comprise integrated ~~circuitry~~ circuits.

11. (Currently Amended) The energy meter of ~~device according to one of the claims 1 to 10~~ claim 1, ~~characterized by the fact that~~ further comprising a non-galvanic coupling transmitter ~~(16) is~~ electrically connected to at least one of the first input ~~(1) and/or~~ of the first analog/digital transformer and the ~~second~~ input of the second analog/digital transformer, wherein the non-galvanic coupling transmitter is configured ~~(2)~~ to switch on the received signal. ~~that is derived from a voltage (V) and/or from a current (I).~~

12. (Currently Amended) The energy meter of ~~device according to~~ claim 11, wherein ~~characterized by the fact that~~ the non-galvanic coupling transmitter ~~(16) is designed as~~ comprises a transformer.

13. (Currently Amended) The energy meter of ~~device according to one of the claims 1 to 12~~ claim 1, ~~characterized by the fact that a means is provided to generate~~ further comprising a test signal generator ~~(17), which is~~ electrically connected to ~~coupled with~~ the inputs of the first and second analog/digital transformers, wherein ~~input (1,2) of the energy meter device~~ the test signal generator is configured to provide ~~in order to feed in the~~ a test signal in a calibration mode.

14. (Currently Amended) The energy meter of ~~device according to one of the claims 1 to 12~~ claim 22, ~~characterized by the fact that~~ wherein the phase correction block ~~(6)~~ comprises ~~an initial~~ a first digital filter, and the energy meter device further comprises ~~that~~ a second digital filter ~~(5) is applied~~ between the output of the first ~~analog/digital~~ analog/digital transformer ~~(3)~~ and the multiplier. ~~(7).~~

15. (Currently Amended) The energy meter of ~~device according to~~ claim 14, further comprising a ~~characterized by the fact that a means is provided for scanning~~ sampling rate control device ~~(19), which is coupled~~ electrically connected to ~~with each~~ the control input of the phase correction block ~~(6)~~ and the input of the second digital filter.

~~(5).~~

16. (Currently Amended) A method for calibrating ~~the calibration of~~ an energy meter ~~device~~, comprising: ~~with the following steps:~~

[[-]] coupling a test signal to ~~two~~ first and second inputs ~~(1,2)~~ of ~~an~~ the energy meter; ~~device,~~

[[-]] digitizing ~~of~~ the test signal coupled to the first input to generate a first digitized test signal;

digitizing the test signal coupled to the second input to generate a second digitized test signal; ~~that is positioned at both inputs (1,2),~~

[[-]] ~~establishing~~ determining a phase deviation between ~~both~~ the first and second digitized test signals ~~(ΔΦ)~~,

[[-]] generating a phase correction signal; and

~~charging~~ applying the phase correction signal to one or more of the first and second ~~of one of both~~ digitized test signals. ~~with the phase correction signal.~~

17. (Currently Amended) The method of ~~according to~~ claim 16, wherein determining the phase deviation comprises measuring ~~characterized by the establishment of the phase layers of both digitized test signals through the measurement of the~~ signal peak values of the first and second digitized test signals ~~in order~~ to establish the phase deviation. ~~(ΔΦ).~~

18. (Currently Amended) The method of ~~according to~~ claim 16, wherein determining the phase deviation comprises measuring ~~characterized by the establishment of the phase layer of both digitized test signals through the measurement of the~~ signal zero points of the first and second digitized test signals ~~in order~~ to establish the phase deviation. ~~(ΔΦ).~~

19. (Currently Amended) The method of ~~according to one of the claims 16 to 18~~ claim 16, ~~characterized by each~~ further comprising digitally ~~digital~~ filtering ~~of both~~ the first and second digitized test signals prior to determining ~~the establishment of~~ the phase deviation. ~~(ΔΦ).~~

20. (Currently Amended) The method of ~~according to~~ claim 19, ~~characterized by the~~ further comprising setting ~~of the scanning~~ a sampling rate of the ~~digital~~ filtering of the first and second ~~both~~ digitized test signals. ~~prior to the establishment of the phase deviation (ΔΦ).~~

21. (Currently Amended) The method of ~~according to one of the claims 16 to 20~~ claim 16, ~~characterized by the inductive~~ wherein coupling the test signal to the first and second inputs comprises inductively coupling ~~of~~ the test signal to at least ~~at~~ one of the first and second inputs ~~input (2)~~ of the energy meter device.

22. (New) The energy meter of claim 1, further comprising a multiplier electrically connected to the outputs of the first and second analog/digital transformers.